## Reforming the Ukrainian Armed Forces on a Budget

A Monograph

by

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#### Abstract

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Historically, reforming an army has been an expensive endeavor. In addition, the process of reform is usually a peacetime issue. In 2014, the Ukrainian Armed Forces (UAF) found itself in a position where it had to fight and reform simultaneously. Moreover, the Ukrainian government set an ambitious goal to integrate with NATO in 2020, so the UAF is reforming to the NATO standard. This research presents analysis of the progress that the UAF has made during the war fighting years of 2014-2016 and the gap between the UAF's current state and its desired state of NATO integration. Finally, it offers suggestions for quick and inexpensive reforms that demonstrate the UAF's commitment towards NATO, while avoiding significant impacts on the war-strained economy of Ukraine.

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## Acronyms

AT Antitank

DEEP Defense Educating Enhancement Program

ETEE Education Training Exercise and Evaluation

GDF General Defense Forces

GDP Gross Domestic Product

JRRF Joint Rapid Reaction Forces

MOD Ministry of Defense

NATO North Atlantic Treaty Organization

NCO Noncommissioned Officer

NFPOR NATO Framework Policy on Reserves

NTG NATO Training Group

NRFC National Reserve Forces Committee

NUC NATO-Ukrainian Commission

OE Operational Environment

PMR Professional Military Reserve

UAH Ukrainian Hryvnia

UAF Ukrainian Armed Forces

UAV Unmanned Aerial Vehicles

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## Introduction

The Ukrainian Armed Forces (UAF) has experienced difficult times since Ukraine obtained its independence, which have only become harder with the annexation of Crimea and the war in Eastern Ukraine. Thus, for the last three years the UAF has been fighting on two fronts. The first one is fighting the enemy; the second one is rebuilding itself from the ashes in order to become more capable and a more desirable ally for the West. This monograph is about reforming the UAF, the side of this struggle that is not explicitly bloody, yet requires great efforts from service members and the Ukrainian Government.

Despite economic stagnation, there are ways to reform the UAF through thoughtful allocation of existing resources and small investments. Written from the perspective of a UAF field grade officer, this research offers quick and inexpensive reforms that nonetheless demonstrate UAF commitment towards integration with NATO. This paper begins by analyzing some of the UAF's current problems, and then proposes solutions. In the forms of concepts for reforms, not fully detailed programs.

Ukraine celebrated its twenty fifth anniversary as a sovereign state on August 24, 2016. A military parade in Kiev is traditional on this day. President Petro Poroshenko gave a speech, in which he reminded Ukrainians where they come from, what they went through, and the current state of Ukrainian nation. The president also described the way he foresees for Ukraine in the future, and made clear, the future of Ukraine is EU and NATO membership. Reinforcing his words, several NATO countries' military formations marched shoulder to shoulder with Ukrainian troops. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> "Speech of the President of Ukraine Petro Poroshenko at the Independence Parade," President of Ukraine, August 24, 2016, accessed September 11, 2016, http://www.president.gov.ua/en/news/vistup-rezidenta-ukrayini-pid-chas-paradu-nezalezhnosti-37949.

"A sovereign, independent, and stable Ukraine, firmly committed to democracy and the rule of Law, is the key to Euro-Atlantic security." These words emphasize and underline the true intentions of the NATO allies. The Ukrainian path to NATO started immidietly after the collapse of the Soviet Union. In 1991, Ukraine joined the North Atlantic Cooperation Council (changed to Euro-Atlantic Partnership Council in 1997), then in 1994, Ukraine joined the Partnership for Peace, the first of the Commonwealth of the Independent States to do so. Then, in 1996, Ukraine participated in its first peacekeeping mission under the NATO umbrella in Bosnia and Herzegovina. With each successive year, Ukraine built up its reputation as a contributor to NATO. Nevertheless, twenty-five years after its first commitment, Ukraine has yet to become an official candidate member of NATO. Blaming the Soviet legacy or corruption does not solve the problem. This research is not, therefore, about accusations or responsibility; it is about showing progress and recommending solutions.

Ukraine missed its chance to become a member of NATO before losing Crimea, and the war in the East started in part because of inconsistencies in past government policy, and its inability to choose between West and East.<sup>4</sup> Therefore, it is more appropriate than ever to commence reforms that move Ukraine closer to integration and interoperability with NATO members, because this can help to repulse further aggression in the future.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup> "Relations with Ukraine," North Atlantic Treaty Organization, June 22, 2016, accessed September 26, 2016, http://www.nato.int/cps/en/natolive/topics 37750.htm.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Scott Schenking, "Back to the 90s – How Past Mistakes Will Drive Ukraine's Future," *Transconflict*, March 7, 2014, accessed September 17, 2016, http://www.transconflict.com/2014/03/back-to-the-90s-how-past-mistakes-will-drive-ukraines-future-073/.

<sup>&</sup>lt;sup>5</sup> The White House, "Fact Sheet: U.S. and NATO Efforts in Support of NATO Partners, Including Georgia, Ukraine, and Moldova," US Mission to the North Atlantic Treaty Organization, July 10, 2016, accessed September 11, 2016, https://nato.usmission.gov/fact-sheet-u-s-nato-efforts-support-nato-partners/.

## Methodology

The monograph aims to identify the existing gaps between NATO integration requirements and the current condition of the UAF. In order to do so, this monograph relies primarily on expert assessments, NATO requirements and policy, and excerpts from Ukrainian government and NATO official statements and documents. The author, a UAF officer with fifteen years of service, uses the Army Design Methodology (ADM) framework to investigate the existing gaps, and propose possible reforms. According to Army Technical Publication 5-0.1, ADM entails framing the operational environment, framing a problem, and then framing solutions. In this case, framing the operational environment means describing the current state of the UAF and the desired end state of operating in accordance with NATO standards and requirements; framing the problem is identifying the gaps between the current and desired states; framing solutions is developing reforms that narrow the existing gaps.

Although the integration process with NATO entails a complex of reforms not just limited to the UAF, this thesis does not investigate those other Governmental reforms. The Ukrainian Government and Western allies developed "Ukraine 2020 Strategy" that includes over sixty different reforms. Security reform in the "Ukraine 2020 Strategy" does not specifically mention the UAF, but promises to reform the defense and security systems, and the military-industrial complex.

The criteria used to identify gaps are budget, reserve system, manning and personnel, training and education. The budget criteria discusses the amount of government spending and compares it with NATO requirements. The reserve system discusses improvements and reforms

<sup>&</sup>lt;sup>6</sup> Army Technical Publication (ATP) 5-0, *Army Design Methodology* (Washington, DC: Government Printing Office, 2015), iii.

<sup>&</sup>lt;sup>7</sup> "Ukraine 2020 Strategy," National Reform Council, 2016, accessed September 22, 2016, http://reforms.in.ua/sites/default/files/imce/2020booklet21\_11engpreview.pdf.

<sup>&</sup>lt;sup>8</sup> Ibid.

made to the UAF professional reserve system. The criteria of manning and personnel discusses the conscript, contracted, volunteer, and officer corps issues. In addition, it examines improvements in terms of quality of soldier's life, and the influence of that quality on the number of contracted soldiers and officers. The training and education criteria provides analysis of the progress in these areas during the three years of the ongoing confrontation.

The monograph is structured into four major sections. The background and significance section concisely outlines the development of the Ukrainian - NATO relationship from 1991 to 2016. The second section frames the operational environment by describing the current state of the UAF and desired end state, and identifies the gap between the two. The third section frames solutions by proposing inexpensive and quick reforms that support integration with NATO. The last section summarizes the research and highlights the significance, purpose, and utility of the proposed reforms.

## Background

The annexation of Crimea and the current war with Russia in Eastern Ukraine proved to be a revelation not just for Ukraine, but also for international society. Russia still plays the role of the Soviet Union with little changed, using the same ends, ways, and means. Actions in Moldova, Armenia, Georgia, Ukraine, and Syria are just tools in Russian hands in order to influence their geopolitical stance in the world. "First and foremost, it is worth acknowledging that the demise of the Soviet Union was the greatest geopolitical catastrophe of the century," Putin said during a speech in Kremlin in 2005. <sup>10</sup> And in order to correct this catastrophe, Russia needs Ukraine on its

<sup>&</sup>lt;sup>9</sup> Nadezhda K. Arbatova and Alexander A. Dynkin, "World Order after Ukraine," *Survival* 58, no. 1 (February-March 2016): 71-90, accessed August 25, 2016, https://www.iiss.org/en/publications/survival/sections/2016-5e13/survival--global-politics-and-strategy-february-march-2016-44d5/58-1-06-arbatova-and-dynkin-ba5a.

<sup>&</sup>lt;sup>10</sup> "Putin Calls Collapse of Soviet Union 'Catastrophe'," *Washington Times*, April 26, 2005, accessed October 12, 2016, http://www.washingtontimes.com/news/2005/apr/26/20050426-120658-5687r/.

side. According to Arbatova and Dynkin, Ukraine is one of Russia's most important projects.

Ukraine delivers and ensures a legitimacy to Russia's Eurasian Empire, and Ukraine supplies critical goods for Russia's economy and military. 11

After the collapse of the Soviet Union, fifteen new and independent states faced the problem of security. The development of their own armed forces mirrored each country's interests and resources. Stephen Olynyk, who was a consultant on national security to the Ukrainian Government, states that Ukraine is the most important nation to have emerged after Russia. The size of Texas, the population of New York, Florida and Illinois combined, and rich in natural resources, Ukraine could play a key role in the new geopolitical environment of eastern and central Europe. Moreover, Olynyk argues that because of speed of the actual breakup, all post-Soviet states inherited their armed forces practically intact. However, while Russia was left with second-rate forces that were a part of the strategic reserve, countries such as Ukraine and Belarus inherited first class force packages that were the second strategic echelon of the western theater of operations of the Warsaw Pact. 12

In 1991, after gaining independence, Ukraine suddenly became the third largest nuclear power in the world. It had 176 landbased nuclear Intercontinental Ballistic Missiles and forty-one strategic bombers with a total of 1,700 nuclear warheads. In addition, Ukraine inherited 725,000 military personnel, 6,300 tanks, 7,200 APCs, 10,000 artillery and antitank weapons, 1,380 aircraft and 240 helicopters. <sup>13</sup> Immediately after the breakup, the Ukrainian Government commenced military reforms. In the book, Sharon Wolchik declares that the only successful military reform that Ukrainian Government conducted in the UAF was dramatic force reductions. In 1992, the plan was

<sup>&</sup>lt;sup>11</sup> Arbatova and Dynkin, "World Order after Ukraine."

<sup>&</sup>lt;sup>12</sup> Stephen D. Olynyk, "Ukraine as a Post-Cold War Military Power," *Joint Force Quarterly* (Spring 1997): 87-94, accessed September 11, 2016, http://www.dtic.mil/doctrine/jfq/jfq-15.pdf.

<sup>&</sup>lt;sup>13</sup> Sharon L. Wolchik and Volodymyr Zviglyanich, eds., *Ukraine: The Search for a National Identity* (Lanham, MD: Rowman and Littlefield, 2000), 74-88.

to cut the force in half over the next five years. Because of poor budgeting, the UAF had trouble conducting military exercises to maintain individual and unit proficiency. Moreover, in the 1990s, because of lack of funding for the UAF, most of the equipment was conserved in order to preserve existing capabilities.<sup>14</sup>

Ukrainian officials had argued the necessity of an independent Ukrainian Armed Forces prior to dissolution of the Soviet Union. On July 16, 1990, the parliament of the Ukrainian Soviet Socialistic Republic (SSR) voted for the Declaration of State Sovereignty. One of the key aspects of it was the right of the Ukrainian State to build and develop its own Armed Forces. In August 1991, Ukrainian leadership feared that the military coup in Moscow could spread to Ukraine. Therefore, the government announced that all Soviet military property on the Ukraine territory belonged to the Ukrainian SSR. Moreover, in order to reduce tensions within the newly formed force and to eliminate the possibility of military actions against the population, Ukrainian officials compelled former Soviet Army personnel to take the Ukrainian Oath in the beginning of 1992. 15

Simultaneously, the newly designed military policy of Ukraine paid significant attention to establishing military cooperation with neighboring countries. By the summer of 1994, Ukraine signed military cooperation agreements with all of its neighbors except Russia. Russia was considered the main source of potential problems. In order to mitigate the threat, Ukrainian officials signed additional cooperation agreements with the defense officials from the United States, Germany, and Great Britain. <sup>16</sup>

One of the first steps to address the existing military issues in Ukraine was developing and approving the *Concept of Defense and Military Building in Ukraine* by the Ukrainian Government.

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Oleg Strekal, "The Ukrainian Military, and Civil-Military Relations in the Post-Cold War Era," *GlobalSecurity.org* (1994): 11-14, accessed October 19, 2016, http://www.globalsecurity.org/military/library/report/1994/ocp2.pdf.

<sup>&</sup>lt;sup>16</sup> Ibid., 11-12.

Almost at the same time the parliament accepted the sequence of the *Laws On Ukraine's*Defense, On Armed Forces, and more than twenty related documents. 17

In October 1993, Ukrainian politicians formally declared a new military doctrine that outlined national political interest and policy. The military doctrine is a reflection of Ukraine's geopolitical situation and a long-term prognosis of its development. The main feature of this new Ukrainian military doctrine was its defensive posture. The main task was repelling possible aggression. At the same time, the doctrine did not point out who or what could be a threat. The security policy of Ukraine was based on respect for other independent states, on the principle of nonintervention, and on resisting the idea of using the UAF as an instrument of foreign policy. The fundamental law of "reasonable defense sufficiency" dictated the size and types of forces, weapons, and systems of Ukrainian security forces. In 1993, it described the future of the UAF as "a modern, well-trained, well-armed and highly mobile force, with a special emphasis on precision weapons, intelligence and electronic warfare capability, air and space defense and sufficient air and sea power." <sup>18</sup>

What is peculiar about this military reform is that twenty-three years later nothing has changed. In 2016, RAND conducted a thorough investigation that highlighted the existing problems of the UAF during the Anti-Terror Operation in Eastern Ukraine. These problems were insufficient training and armament, lack of mobility and precision weapons, compromised intelligence, and weak electronic warfare capabilities. RAND provided a dramatic conclusion that the UAF, as a part of the Ukrainian security organizations, failed "to respond effectively to the emerging conflict in the Eastern Ukraine."

<sup>&</sup>lt;sup>17</sup> Ibid., 13-14.

<sup>&</sup>lt;sup>18</sup> Askold I. Kobasa, "A Strategic-Military Analysis of the Ukrainian Armed Forces" (master's thesis, Naval Postgraduate School, 1995), 34-36, accessed October 19, 2016, https://core.ac.uk/download/pdf/36724094.pdf.

<sup>&</sup>lt;sup>19</sup> Olga Oliker et al., Security Sector Reform in Ukraine (Santa Monica, CA: RAND, 2016), 103.

However, the UAF is currently undergoing further reformation and Ukraine now has a new military doctrine. President Poroshenko signed the *New Edition of the Military Doctrine of Ukraine* on September 2, 2015. This doctrine is based on the fact that Ukraine is currently dealing with Russian armed aggression. It outlines the possible Russian build up, its militarization of temporarily occupied territories, its deployment of tactical nuclear weapons in Crimea, and the aggressive reconnaissance and subversion activities of Russian Special Forces that are directed towards undermining Ukraine's international standing and destabilizing its internal situation. The new doctrine also stipulates that the key to repairing Ukraine's territorial integrity lies in a comprehensive reform of its national security system. Moreover, the goal of the UAF is to reach a level that is acceptable for membership in the European Union and NATO. An additional purpose is to redevelop the UAF to a Western standard and achieve interoperability with NATO forces.<sup>20</sup>

Ukraine made the first step towards NATO soon after gaining independence. In January 1992, Ukraine's representative took part in the high level North Atlantic Cooperation Council for the first time. A month later, NATO Secretary General M. Verner visited Ukraine. After that visit the NATO-Ukraine relationship experienced a cascade of events. Ukraine was the first country of the Commonwealth of Independent States to sign the Partnership for Peace (PfP) Framework Document. NATO commented that Ukraine did a good job during NATO missions in Kosovo, Iraq, Afghanistan, and counter-terrorist operations in the Mediterranean. In May 1997, NATO opened its Information and Documentation Center in Kiev; and at the same time, Ukraine established a diplomatic mission to NATO. NATO started the assistance mission to reform the UAF in 1998 with

<sup>&</sup>lt;sup>20</sup> "President Approved New Edition of Military Doctrine of Ukraine," Ministry of Defense of Ukraine, September 24, 2015, accessed October 19, 2016, http://www.mil.gov.ua/en/news/2015/09/24/president-approved-new-edition-of-military-doctrine-of-ukraine/.

the NATO-Ukraine Joint Working Group on Defense Reform. In 2000, after the Ukrainian Government ratified its PfP Status, the UAF hosted its first international disaster-response exercise, Trans-Carpathian 2000.<sup>21</sup>

In 2002, Ukraine's officials announced that NATO membership was as a goal of cooperation. In the same year, NATO and Ukraine officials created a roadmap towards Euro-Atlantic integration. After the Orange Revolution, newly elected Ukrainian President Victor Yushchenko attended a summit in NATO headquarters in Brussels. NATO officials pledged support and agreed to refocus the existing cooperation in line with the new government's priorities. In 2008 and 2009, during the NATO - Ukrainian Commission (NUC), the foreign ministers agreed to enhance the assistance for Ukraine and develop an Annual National Program. However, after the 2010 presidential election, the Ukrainian government left NATO membership out of its new agenda. Nonetheless, in 2012, NATO initiated the Defense Education Enhancement Program at the request of the Ukrainian Defense Minister.<sup>22</sup>

Starting in March 2014, NATO officials repeatedly called on Russia to avoid escalation in Crimea. In April and June, NATO agreed to provide support for Ukrainian defense capabilities. On December 29, 2014, President Poroshenko signed a law that canceled the neutral status for Ukraine. At the same time, the President announced that Ukraine and its Armed Forces would seek to achieve the standards for NATO membership.<sup>23</sup>

Despite twenty-five years of effort, the NATO-Ukraine relationship had no significant effect on the reformation of the UAF until the conflict with Russia. NATO Secretary General Jens Stoltenberg visited Ukraine right after its new military doctrine was adopted. On September 22, 2015, the Secretary General met with Ukraine's National Defense and Security Council and

<sup>&</sup>lt;sup>21</sup> "Relations with Ukraine," NATO, June 22, 2016, accessed October 20, 2016, http://www.nato.int/cps/en/natolive/topics\_37750.htm.

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Ibid.

promised political and practical support. "In these difficult times, Ukraine can rely on NATO," he said. In addition, the sides discussed the five Trust Funds, which NATO is currently running for Ukraine. The Trust Funds are meant to support projects in command and control, cyber defense, logistics, medical rehabilitation, and military career transition. Stoltenberg noted that NATO is also providing an advisory mission to the Ministry of Defense and the General Staff, assisting military reform in the UAF.<sup>24</sup>

In the following sections, the author will describe the current condition of the UAF, NATO requirements for applicants, and the steps the UAF has made and will make in order to increase its readiness to integrate with NATO.

## Framing the Operational Environment and Problems

The main purpose of this section is to identify the gaps between the current state of the UAF and the desired state of meeting NATO's requirements for its applicants. The criteria that the author uses to identify the gaps are budget, reserve system, manning and personnel, and, training and education. Each criteria is analyzed separately, the analysis consisting of the current situation, NATO's requirements, and finally the gap between them.

## Budget

#### **Current State**

In February 2016, the Defense Minister of Ukraine Stepan Poltorak stated that the military budget of 2016 is four times greater than that of 2014. Therefore, the Defense Minister mentioned, the 2016 budget supported the main principles and approaches designated in the reform program of the UAF. He pointed out that the ambitious goal of rebuilding the UAF by 2020 was on the right

<sup>&</sup>lt;sup>24</sup> "Ukraine Can Rely on NATO, Secretary General Says in Visit to Kiev," NATO, September 22, 2015, accessed October 20, 2016, http://www.nato.int/cps/en/natohq/news\_122690.htm.

track, and that he was sure that the reforms would be successful. <sup>25</sup> However, the incumbent defense minister is not the first one who has made such statements. Glenn Kates, in her article *Defense Minister: Kiev's Least Secure Job*, points out that the current Defense Minister, Stepan Poltorak, is the fourth since the beginning of the Revolution of Dignity in January 2014, and the fifteenth since independence. <sup>26</sup> Fifteen ministers in twenty-two years of independence is not conducive to an atmosphere of reliability and consistency. This subsection analyzes what a quadruple increase in the budget really means, and what kind of effect it can have on the reformation of the UAF.

Officials say that the military budget of 2016 is nearly \$4.4 billion or 113 billion UAH, which is 5 percent of Ukraine's GDP. At the same time, the Defense Minister has also announced an increase in the salaries of Ukrainian service members. After the announcement of the actual numbers, the National Security Council (NSC) Secretary Oleksandr Turchynov called it the "minimum which allows us to resist further Russian aggression." On the same day, the Deputy of the NSC Oleh Hladkovskyy stated in an interview that the Air Force will have the priority for renewal in 2016.

The author proposes a clearer representation of the \$4.4 billion military budget. According to Natalia Yaresko, Ukrainian Finance Minister, the minimum salary for a soldier in 2016 will be

<sup>&</sup>lt;sup>25</sup> "Defense Minister of Ukraine: 'Military Budget for Year 2016 Is Four Times Greater Than in 2014'," Ministry of Defense of Ukraine, February 27, 2016, accessed October 25, 2016, http://www.mil.gov.ua/en/news/2016/02/27/defense-minister-of-ukraine-military-budget-for-year-2016-is-four-times-greater-than-in-2014% E2% 80% 9D/.

<sup>&</sup>lt;sup>26</sup> Glenn Kates, "Defense Minister: Kiev's Least Secure Job," Radio Free Europe, October 13, 2014, accessed October 27, 2016, http://www.rferl.org/a/ukraine-revolving-door-defense-ministers/26635213.html.

<sup>&</sup>lt;sup>27</sup> Evgen Vorobiov, "Ukraine's Parliament Passed the Much-Needed 2016 Budget," *Euromaidan Press*, December 27, 2015, accessed October 25, 2016, http://euromaidanpress.com/2015/12/27/ukraines-parliament-passed-the-much-needed-2016-budget/#arvlbdata.

<sup>&</sup>lt;sup>28</sup> "Ukraine to Increase Military Expenditure by 30% in 2016," *Ukraine Today*, December 5, 2015, accessed October 25, 2016, http://uatoday.tv/politics/ukraine-to-increase-military-expenditure-by-30-in-2016-548205.html.

7,000 UAH per month, which is the base pay.<sup>29</sup> This does not include compensation for housing and other additional yearly stipends, which usually equal two additional month's pay and thus makes a sum of 98,000-100,000 UAH a year. The author's last paycheck was 14,700 UAH per month or 160,000-170,000 UAH yearly. Let us take 135,000 UAH as the average of a soldier's and officer yearly salary, which is equal to \$5,400. The UAF has 240,000 personnel. Using this rough math, the UAF spends approximately \$1,296,000,000 on salaries, and therefore after paying its soldiers, the UAF still has more than \$3 billion for other expenses. Given that modernizing one old T-64 tank costs approximately \$900,000, that a new BTR-3 or BTR-4 APC costs \$1.3-1.7 million, and upgrading an old SU-25 is around \$10 million, that \$3 billion remaining still leaves substantial room for technological improvement.<sup>30</sup> However, these \$4.4 billion also include costs such as pensions, utility bills, training, maintenance, food, ammunition, gear, installations, medical support, and exact expenditures are not available to the public.

#### **Desired State**

NATO is funded by its members. Current members provide money to implement NATO's policies and activities. There are two principles of funding. The first is national, also called indirect, when a country decides to contribute to a particular NATO mission and financially supports that decision. The second method, common funding, also called direct, is the contribution of a small percent of the defense budget based on the Gross National Income, according to the agreed cost share formula. In 2006, NATO members agreed to spend 2 percent of their GDP on defense. This 2 percent line ought to serve as an indicator of each country's commitment. However, the size of

<sup>&</sup>lt;sup>29</sup> "Salary of ATO Soldiers to Increase Fourfold, - Minister Jaresko," *Censor.Net*, January 27, 2016, accessed October 25, 2016, http://en.censor.net.ua/news/371222/salary\_of\_ato\_soldiers\_to\_increase\_fourfold\_minister\_jaresko.

<sup>&</sup>lt;sup>30</sup> "Modern Day Military Pricing List," Fandom, 2009, accessed October 25, 2016, http://nationcreation.wikia.com/wiki/Modern\_Day\_Military\_Pricing\_List.

these contributions is relative. For instance, in 2006 United States defense spending was 73 percent of the Alliance's total defense spending.<sup>31</sup>

In 2014, at the Wales Summit, due to the overall decline below the 2 percent guideline, NATO members reasserted their commitment in a new agreement. According to the summit's summary, NATO countries agreed to prevent a further decline in defense spending, and within a decade, to meet the 2 percent guideline. Another important agreement was reached about the amount of money the members spend on the procurement of new equipment and modernization: countries agreed on a 20 percent guideline with full implementation over the following ten years.<sup>32</sup> However, this type of agreement was advisory in nature and is not backed by any sort of penalty. There is a high probability that in ten years NATO will have other issues and demands.

Those who do not meet the 2 percent guideline are not only the poor countries. For instance, countries like France, Germany, Canada, and Italy are not currently meeting the guideline. Just five NATO members reached the recommended numbers in 2016: United States, Greece, Estonia, Great Britain, and Poland. The highest percent usually belongs to United States, which currently stands at 3.6 percent of GDP.<sup>33</sup>

### Gap

If Ukraine were to become a NATO member today, it would place first in the numbers contest. Ukraine devoted 5 percent of its GDP to the defense budget in 2016. It hard to say today how much of this money will be spent on procurement of new assets and modernization, but the overall percentage seems impressive. Of course, there are reasons why the Ukrainian Government

<sup>&</sup>lt;sup>31</sup> "Funding NATO," NATO, June 3, 2015, accessed October 27, 2016, http://www.nato.int/cps/en/natohq/topics 67655.htm.

<sup>&</sup>lt;sup>32</sup> Ibid.

<sup>&</sup>lt;sup>33</sup> Ivana Kottasova, "Which NATO Members Are Falling Short On Military Spending?," *CNN Money*, April 15, 2016, accessed October 27, 2016, http://money.cnn.com/2016/04/15/news/nato-spending-countries/.

does this. Current Russian aggression, the years of negligence, and the probability of further escalation generate the necessity to act quickly and intelligently. It is not an accident that two of the five NATO countries that are meeting the defense expenditure guideline, Poland and Estonia, are also neighbors of Russia and share the Soviet past with Ukraine.<sup>34</sup> Analyzing their military budget alongside Ukraine's will help to spot the difference in how much current NATO members and the potential member spend on defense.

Estonian and Polish military spending did not change significantly after the beginning of Russian aggression in Ukraine, despite official concerns and statements. In 2016, these countries spent a little over 5 percent of their GDP for defense. For Estonia, their defense budget was \$497 million and for Poland, it was \$9,349 million. Ukraine spends 5 percent, or \$4.4 million (see Table 1). Although difficult to compare military salaries because of lack of information, it is possible to analyze the average amount of money that countries spend on modernization. The average of what Estonia and Poland spend on modernization is 19 percent. Nineteen percent of Ukraine's military budget of \$4.4 billion equals \$900 million, compared to the \$2.3 billion that Poland is planning to spend on modernization. Poland therefore spends approximately two-and-a-half times more on modernization than the UAF, yet has armed forces two-and-a-half times smaller.

Table 1. Comparative Analysis of Defense Spending in 2016 of Estonia, Poland, and Ukraine

| - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - |       |            |            |              |               |           |
|--|-------|------------|------------|--------------|---------------|-----------|
|  | % GDP | \$ million | Personnel, | Budgeted per | % spent on    | % spent   |
|  | 2016  | Dollars    | thousands  | capita,      | modernization | on        |
|  |       |            |            | thousands    |               | personnel |
| Estonia                                | 2     | 500        | 6          | 83           | 13            | 38        |
| Poland                                 | 2     | 9,350      | 103        | 91           | 25            | 45        |
| Ukraine                                | 5     | 4,400      | 240        | 18           | no data       | no data   |

 $Source: "Defense Expenditures of NATO Countries (2009-2016)," NATO, July 4, 2016, accessed November 4, 2016, http://www.nato.int/nato_static_fl2014/ass ets/pdf/pdf_2016_07/20160704_1 60704-pr2016-116.pdf.$ 

There are two major conclusions. First, Ukraine is making the 2 percent requirement.

However, second, taking into consideration the size of the UAF and Ukraine's poor economy, the

<sup>&</sup>lt;sup>34</sup> Ibid.

Ukrainian 5 percent expenditure is significantly smaller than Poland's 2 percent (see Table 1).

Ukraine should continue to increase its military budget in order to show commitment to the Alliance, and to strengthen its military in order to deter further aggression and create the stability needed for a stronger economy.

## Reserve Systems

This portion of the monograph analyzes improvements and reforms that the UAF professional reserve system underwent from the beginning of 2014 to the end of 2016. This is followed by discussions of NATO requirements and the gap that the UAF has to overcome.

### **Current State**

Ukraine's reserve structure did not initially change from the Soviet Union's. The structure was based on general mobilization in case of full-scale aggression. According to a Jane's assessment conducted right before the Russian aggression in Crimea and in the East, Ukraine's reserve pool was 940,000 (see Table 2). At the same time the Jane's assessment expressed doubts that the UAF could mobilize such a force due to poor maintenance of old equipment, absence of training, and inefficient administration.<sup>35</sup> In addition, the meaning of the word *reserve* in this context is peculiar and requires elaboration. In case of the full-scale mobilization, 940,000 people were registered in the military commissariats as eligible for military service. However, for the Professional Military Reserve (PMR) that conducts at least some kind of training on a regular basis the numbers are considerably lower. According to the *White Book 2013*, the UAF had only 2,400 personnel serving in the Military Reserve at the end of 2013.<sup>36</sup>

<sup>&</sup>lt;sup>35</sup> "Jane's Sentinel Security Assessment, Russia and the CIS," IHS Jane's Military and Security Assessments Intelligence Center, 2014, accessed November 21, 2016, http://www.janes360.com/images/assets/760/34760/ukraine armed forces.pdf.

<sup>&</sup>lt;sup>36</sup> White Book 2013 (Kiev: Ministry of Defense of Ukraine, 2014), 27.

Table 2. Total Strength of the UAF in 2014

|  | Total Strength | Army    | Navy    | Air Force |
|--|----------------|---------|---------|-----------|
| Active personnel   | 139,000*       | 68,000  | 43,100  | 14,700    |
| Reserves   | 940,000        | 590,000 | 249,000 | 101,000   |
| *There are an additional 32,000 interior troops, 42,000 border troops, 9,000 civil defense troops, |                |         |         |           |

<sup>\*</sup>There are an additional 32,000 interior troops, 42,000 border troops, 9,000 civil defense troops, and 45,000 civilian personnel.

*Source:* "Jane's Sentinel Security Assessment, Russia and the CIS," IHS Jane's Military and Security Assessments Intelligence Center, 2014, accessed November 21, 2016, http://www.janes360.com/images/assets/760/34760/ukraine\_armed\_forces.pdf.

In 2006, the Ministry of Defense (MOD) initiated the process of eliminating its strategic reserves. There were three reasons for this reform. First, the economic hardship in the country did not support maintenance of the assets that belonged to the strategic reserve. Second, the assets stored in strategic warehouses were obsolete, unfit for service, poorly maintained, and in disrepair. Third, the Ukrainian government did not forecast aggressive actions against Ukraine, let alone events like the annexation of Crimea and Russian aggression in Eastern Ukraine. Therefore, MOD adopted a new system. The UAF shifted to consisting of two components based on their readiness and strength. These were the Joint Rapid Reaction Forces (JRRF) and the General Defense Forces (GDF).<sup>37</sup>

The JRRF consisted of combined-arms units that required no additional personnel and were battle-ready within 24-48 hours. The core of the JRRF was airborne units that were manned with professional (contracted) service members with no less than 90 percent of wartime strength.

Numerically, the JRRF represented 10 percent of the entire UAF. The purpose of the JRRF was to create a force that would become the face of the country: the best-equipped, trained, and maintained part of the UAF, "an army within the army." There were 6,000 JRRF troops at the beginning of 2014.<sup>38</sup>

<sup>&</sup>lt;sup>37</sup> Anton Lavrov and Alexey Nikolsky, eds., "Neglect and Rot: Degradation of Ukraine's Military in the Interim Period," in *Brothers Armed: Military Aspects of the Crisis in Ukraine*, 2nd ed., ed. Colby Howard and Ruslan Pukhov, trans. Ivan Khokhotva (Minneapolis: East View Press, 2015), 61.

<sup>&</sup>lt;sup>38</sup> Ibid., 61.

The GDF represented the bulk of the UAF. One-third of the GDF was to be 50 percent manned and 80 percent equipped. The other two thirds of the GDF was to be 20 percent manned and 60 percent equipped. Most of the GDF units were not ready immediately for action. The core purpose of such units was to preserve equipment and infrastructure in case of a full-scale mobilization, in such event they would require at least two months of preparation (see Table 3).<sup>39</sup>

Table 3. UAF Force Structure: 2006 Plan

| Component             | Manned           | Equipped         | Time to a ready state |
|-----------------------|------------------|------------------|-----------------------|
| JRRF (10% of the UAF) | no less than 90% | no less than 95% | 24-48 hours           |
| GDF I (1/3 of GDF)    | no less than 50% | no less than 80% | 30-60 days            |
| GDF II (2/3 of GDF)   | no less than 20% | no less than 60% | 60-90 days            |

*Source:* Anton Lavrov and Alexey Nikolsky, eds., "Neglect and Rot: Degradation of Ukraine's Military in the Interim Period," in *Brothers Armed: Military Aspects of the Crisis in Ukraine*, 2nd ed., ed. Colby Howard and Ruslan Pukhov, trans. Ivan Khokhotva (Minneapolis: East View Press, 2015), 61-62.

The deputy of the MOD Personnel Department, Colonel Halushko, in a 2015 interview on the progress of the mobilization campaign, praised the system for making steps towards better quality and administration. Every next wave of mobilization is better than previous ones. Halushko highlighted the fact that the last time a mobilization campaign of such a size was conducted was almost thirty years ago, after the Chernobyl accident in 1986. Thus, the recruiting officers had no experience. Moreover, Halushko noted that learning under wartime pressure was a real test for the system. In the end, the colonel added that the process is difficult in part because of recruits who in general do not comply with the mobilization law. Apparently, the Ukrainian Government, before Russian aggression, did not see the utility of training the reserve system or reservists. The idea was that the Budapest Memorandum provided the insurance for Ukraine's territorial integrity and military readiness was not required.

<sup>&</sup>lt;sup>39</sup> Ibid., 61-62.

<sup>&</sup>lt;sup>40</sup> Bohdan Butkevych, "Nearest Recruiting Station," *Ukrainian Week, International Edition*, April 16, 2015, accessed November 21, 2016, http://ukrainianweek.com/Society/134925.

When the Russian Federation started its aggression in 2014, the Ukrainian Parliament approved a decree for partial mobilization. The purpose of the partial mobilization was to conscript manpower (including the professional reserve) and vehicles in order to cover the needs of the UAF and other security services. As a result, in 2014, 110,000 people were conscripted and 6,200 vehicles were mobilized from the national economy. The size of the UAF nearly doubled to 250,000.<sup>41</sup>

A year before the conflict broke out, the MOD had 2,400 people in the Professional Military Reserve (PMR). The PMR, unlike the Mobilization Reserve (MR), is a volunteer service with a funded benefits system. The MR is a national reserve of manpower that can be summoned in case of full mobilization. The pool of PMR that were summoned and trained on a regular basis was just 2,400, which is only 1.5 percent of the UAF's total of 165,000 personnel available in 2013.<sup>42</sup>

This small professional military reserve pool had at least two major consequences. First, the president issued a decree that allowed drafting manpower from a Mobilization Reserve pool without a proclamation of full mobilization, basically reinstating conscription. As Second, the MOD had to initiate immediate measures towards reformation of the PMR. As is shown below, the UAF was headed in the right direction.

At the end of 2014, the UAF had 13,400 people in the PMR, which constituted a fivefold increase. A new Presidential Decree updated many aspects of service in the military reserve such as

<sup>&</sup>lt;sup>41</sup> White Book 2014 (Kiev: Ministry of Defense of Ukraine, 2015), 3.

<sup>&</sup>lt;sup>42</sup> White Book 2013, 11.

<sup>&</sup>lt;sup>43</sup> "Presidential Decree of Ukraine," CIS Legislation, March 17, 2014, accessed December 1, 2016, http://cis-legislation.com/document.fwx?rgn=66102.

<sup>&</sup>lt;sup>44</sup> "The Security Sector Legislation of Ukraine," DCAF a Centre for Security, Development and The Rule of Law, 2015, accessed December 1, 2016, http://www.dcaf.ch/Publications/The-Security-Sector-Legislation-of-Ukraine-2012-2014-Updates.

the way of training and registration of enlisted personnel. The decree also specified the difference between the PMR and MR.<sup>45</sup>

In 2015, the MOD established a new military reserve system. The purpose of this change was the creation of a more effective reserve force. The new reserve system consists of three subcomponents: the First Set of the Operative Reserve, the Second Set of the Operative Reserve, and the MR. The old reserve system was abandoned due to its inefficiency and bureaucracy (see Figure 1).<sup>46</sup>

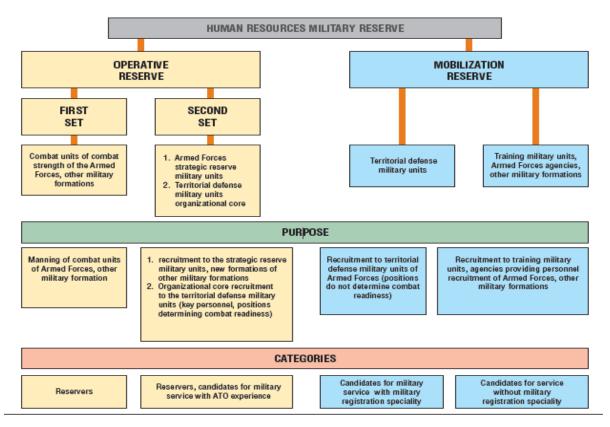


Figure 1. Military Service in Reserve. White Book 2015 (Kiev: Ministry of Defense of Ukraine, 2015), 50.

The First Set of the Operative Reserve includes candidates and reservists that are assigned to a particular unit for a particular job. These reservists fill slots in their assigned units and must be

<sup>&</sup>lt;sup>45</sup> White Book 2014, 39.

<sup>&</sup>lt;sup>46</sup> White Book 2015 (Kiev: Ministry of Defense of Ukraine, 2016), 49.

ready to conduct a mission within 24-48 hours. The training of this set occurs regularly, preferably with organic units. The Second Set of the Operative Reserve contains personnel with key duties and positions that determine combat readiness, that are assigned to the newly created reserve units that constitute the Strategic Reserve and Territorial Defense units.<sup>47</sup> The Strategic Reserve of the General Staff consists of a mechanized corps and a military police brigade. The Reserve Mechanized Corps includes three mechanized, one tank, one artillery brigades and supporting units.<sup>48</sup>

The MR consists of candidates for military service appointed to the territorial guard military units, and candidates with no particular unit assignment. The first group conducts military training on a volunteer basis on holidays and weekends. The second group will undergoes military training during an unspecified "special period."

At the end of 2015, the UAF PMR had grown to 60,000 (another fivefold increase), and was organized according to the new system. In September 2016, the Minister of Defense made a statement that the PMR of the UAF was rising past 85,000 men and women. He also added that reservists are constantly training and honing their skills. The UAF further plans to conduct a brigade size exercise that will involve reservists from the First and the Second Set of the Operative Reserve. <sup>50</sup>

<sup>&</sup>lt;sup>47</sup> Ibid., 50.

<sup>&</sup>lt;sup>48</sup> "Units That Do Not Belong to Any of the Component of the UAF," Ukrainian Military Pages, 2016, accessed December 1, 2016, http://www.ukrmilitary.com/p/other-military-units.html.

<sup>&</sup>lt;sup>49</sup> White Book 2015, 49.

<sup>&</sup>lt;sup>50</sup> "Ukraine's Defense Ministry Elaborates on Military Reserve," UNIAN Information Agency, September 27, 2016, accessed December 1, 2016, http://www.unian.info/society/1541926-ukraines-defense-ministry-elaborates-on-military-reserve.html.

#### **Desired State**

The *NATO Framework Policy on Reserves* (NFPOR) aims to provide a framework and policy for the Reserve Forces of NATO members. NATO recognizes and honors the peculiarities of individual nations in this area, while still attempting to ensure positive results.<sup>51</sup>

Reserve Forces represent different categories of personnel that are not on active duty and usually come from civilian life. Personnel can be voluntary, ex-regular, or conscripts. NFPOR recognizes the complex security environment with less definable threats that NATO is facing today. In addition, economic challenges create additional constraints for members. As a result, nations choose to have smaller but fully professional (volunteer) armies. As armies get smaller, the need for skilled and experienced reservists is greater.<sup>52</sup>

NFPOR underlines that reservists should participate in all scheduled training and exercises in order to ensure their readiness for supporting "NATO operational ambitions." Reservists and active duty personnel should be interchangeable, especially considering NATO missions. NATO does not distinguish between regular and reserve forces because it is each member's responsibility to provide mission ready forces to NATO operations.<sup>54</sup>

The National Reserve Forces Committee (NRFC) provides policy advice on Reserve issues to member countries. The Committee aims to strengthen the preparedness of Reserve Forces and Reservists. NRFC facilitates a forum for exchange of the best practices. The Chief of the NRFC has reported to the NATO Military Committee every year since 1996.<sup>55</sup>

<sup>&</sup>lt;sup>51</sup> "NATO Framework Policy on Reserves," NATO, March 13, 2012, accessed December 3, 2016, http://www.act.nato.int/images/stories/structure/reserve/mc\_0441\_2\_eng.pdf.

<sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> Ibid.

<sup>&</sup>lt;sup>54</sup> Ibid.

<sup>&</sup>lt;sup>55</sup> "National Reserve Forces Committee (NRFC)," NATO, February 2, 2015, accessed December 3, 2016, http://www.act.nato.int/nrfc.

NATO policy on reserve forces does not mention the amount, size, or number of reserve troops members should have. NATO depends on its members to decide on the issue privately. The main requirements for reserve forces according to NATO policy are *availability*, *regular training*, and *interchangeability with active duty units*.

### Gap

According to the latest report of the Minister of Defense of Ukraine, the PMR currently number 85,000 personnel. These personnel joined the reserve after demobilization in 2015 and 2016. All of them have experience in the war zone and improve their skills regularly during scheduled training and exercises. The Ukrainian government recognizes the importance of the PMR and supports initiatives that favor reservists and employers of those reservists. The MOD managed to significantly improve the benefit system for those in the reserve. Military reservists now have a stable paycheck, their career development is regulated, and negative interactions with civilian life have been mitigated.

The UAF PMR system compares favorably to NATO's significant requirements:

Availability—The MOD significantly increased the amount of professional reserve personnel in the past two years as it developed and successfully implemented the new Professional Military Reserve system. The MOD and Ukrainian Government have improved a legislative aspect of the issue. Pay for service and career development opportunities increased. UAF officials are sensitive about incorporating the best reserve systems practices, and seeking advice from allies from all over the world. The MOD and the General Staff conducted an information campaign aimed at attracting personnel that are demobilizing from active duty service.

Regular training—The MOD has delegated this responsibility to the General Staff. The Chief of the General Staff personally approves the yearly plan of reserve personnel training and development. The Minister of Defense intends to execute a brigade-size exercise with the First and Second Sets of Operative Reserves, which will be the first event of this nature since independence.

Interchangeability with active duty units—Most of the current reservists have combat experience and are trained in a military specialty. The First Set of Operative Reserve, who are assigned to a particular units and positions, train with their units regularly and practice interchangeability by training in their specialty with different units.

The size and structure of the national reserve is not regulated by NATO policy, although this feature requires additional attention when analyzing the Ukrainian case. See Table 4 for a comparison of the size and structure of the reserve forces of the United States, Poland, and Lithuania.

Table 4. Comparative Analysis of the US, Polish, Lithuanian, and Ukrainian Reserve Forces

| Country/criteria | Size of reserve forces | % of total military force |
|------------------|------------------------|---------------------------|
| USA              | 1,100,000              | 45%                       |
| Poland           | 240,000                | 60%                       |
| Lithuania        | 6,000                  | 30%                       |
| Ukraine 2013     | 2,400                  | 1.5%                      |
| Ukraine 2014     | 13,500                 | 7%                        |
| Ukraine 2015     | 60,000                 | 27%                       |
| Ukraine 2016     | 85,000                 | 35%                       |

Source: "National Reserve Forces Status: United States of America," NATO, accessed December 3, 2016, http://www.nato.int/nrfc/database/usa.pdf; "National Reserve Forces Status: Poland," NATO, accessed December 3, 2016, http://www.nato.int/nrfc/database/ poland.pdf; "National Reserve Forces Status: The Republic of Lithuania," NATO, accessed December 3, 2016, http://www.nato.int/nrfc/database/lithuania.pdf.

Analysis shows that the UAF professional reservists are available, training regularly, and interchangeable. In terms of the size of the PMR, the UAF have a slightly smaller percentage than NATO members like Poland and the United States have, but are already ahead of Lithuania. The PMR system is developing fast and improving every year. If it continues developing at the same tempo, then by 2019-2020, it will comprise 45 to 50 percent of the total military force. Given continued funding for training and maintenance of the PMR, this reform should be a success.

## Manning and Personnel

This part of the monograph provides analysis of the situation in the UAF regarding manning and personnel issues. Specifically, the analysis provides information on conscripts and

professionals—volunteer corps and officer corps. This analysis will also provide information about improvements in terms of quality of a soldier's life, and that those improvements influenced the increase in contracted soldiers and officers in the UAF up to 156,500.

#### **Current State**

In 2013, the president of Ukraine, Victor Yanukovych, cancelled conscription and announced that military service would be solely on a contract basis. Yanukovych added that a professional army is key to meeting modern challenges. <sup>56</sup> Nevertheless, neither his presidency nor his reform lasted long. Due to the invasion of Crimea and fighting in the East, the Ukrainian government reintroduced conscription in 2014.

In 2015, one of the UAF's highest priority tasks was reorganizing the conscription system. The intent of reorganization was: first, solve recruiting problems for logistic and rear area units whose duties are not connected with combat activities; second, create a larger selection pool for service on a contract basis; and third, increase the size of the MR pool. The government altered the terms and ages of service. All medically approved males from twenty (raised from eighteen) to twenty-seven years of age are eligible for conscription. Draftees serve eighteen months, instead of twelve, unless they have a master's degree, in which case the term is twelve months. In 2015, the UAF conscripted 19,000 people according to the new regulations.<sup>57</sup>

These changes, reinforced with increased pay and reimbursement for housing for contracted soldiers, had and still have a direct impact on the number of potential conscripts. First, a conscripted soldier now has a choice to make. Either he serves eighteen months as a conscript in the barracks, on a tiny salary that is called "cigarettes and socks money" in the UAF, and with no

<sup>&</sup>lt;sup>56</sup> "Yanukovych Signs Order On Last Conscription and Switching to Contract Service Army," *Kiev Post*, October 14, 2013, accessed December 11, 2016, https://www.kyivpost.com/article/content/ukraine-politics/yanukovych-signs-order-on-last-conscription-and-switching-to-contract-service-army-330496.html.

<sup>&</sup>lt;sup>57</sup> White Book 2015, 48.

access to civilian life; or, he signs a contract for a minimum term of three years, and receives many benefits such as better pay and compensation for housing. Second, if he decides to continue conscripted service, the UAF will determine the location of the service, which might be up to a thousand kilometers from home; or, he signs a contract with the unit that is located close to or in an area he desires. Finally, many conscripted soldiers wish to be actively engaged in war fighting, which is not always possible in logistical and rear-area units. However, when they sign a contract, there is a much higher probability of obtaining real war fighting experience.

Because of the successful contracting campaign and pursuit of NATO professional standards, President Poroshenko ended conscription again at the end of 2016. President Poroshenko announced that not a single conscripted soldier was fighting in the East. In addition, Poroshenko stated that there would be no conscription, except in the event of war. Thus, the UAF will consist of volunteer<sup>58</sup> and contracted soldiers and officers that are better prepared, motivated, and supplied.<sup>59</sup>

The speaker of the Ukrainian MOD announced that the UAF currently has 109,000 soldiers and sergeants, and 47,500 officers serving under contract. <sup>60</sup> However, in the opinion of Glen Grant, retired colonel from the British Army and military adviser to Ukraine, the personnel system has two categories, the old and the new generation. The old generation is composed of retirement age colonels and generals, who were educated in the Soviet Union and possess a certain Soviet charm. The new generation is middle-aged officers with combat experience, who know the requirements

<sup>&</sup>lt;sup>58</sup> Volunteer soldiers and officers are different in the matter of their contract term. Contracted personnel sign the contract for a period, three or five years. Volunteer personnel are those who serve out of patriotism, and their contracts stated the term run to the end of the special period, that was announced in 2014 by President Poroshenko and still is in effect.

<sup>&</sup>lt;sup>59</sup> "Ukraine's Poroshenko Says No Conscripts in War Zone," Radio Free Europe/Radio Liberty, November 2, 2016, accessed December 12, 2016, http://www.rferl.org/a/ukraine-conscripts-not-fighting-east-poroshenko/28090727.html.

<sup>&</sup>lt;sup>60</sup> "Zkintsya Jovtnya Ukrayinska Armiya Staye Kontraktnoyu Ta Dobrovolchoyu Poroshenko," *Censor.Net*, October 15, 2016, accessed December 12, 2016, http://ua.censor.net.ua/news/410633/z\_kintsya\_jovtnya\_ukrayinska\_armiya\_staye\_kontraktnoyu\_ta\_dobrovol choyu\_poroshenko.

and problems at the front. Grant argues that the old system is fighting to maintain its power, and is reluctant to delegate and empower the new generation, which decreases the level of initiative and motivation of the new generation. Grant argues that the UAF has too many colonels and generals. As an example, Grant noted, that in NATO militaries, majors and captains usually conduct operational planning, because of recent combat experience, and all of them know that in a year or two they will return to the front line. As Grant notes, "They don't get rusty." Instead, the UAF suffers from rank inflation, with colonels and lieutenant colonels doing the job of majors and captains, while majors and captains filling the role of "cannon fodder."

#### **Desired State**

NATO standards in this regard are worded more as vague expectations than requirements. Those expectations in regard to the NATO personnel policy are best explained in a report delivered by NATO officials after the 9/11 tragedy.

In 2002, Ian Brzezinski, the Deputy Assistant Secretary of Defense for European and NATO Affairs, declared that NATO enlargement would enable Europe to overcome the hardships of globalization more effectively. In preparation for a summit in Prague, Brzezinski oversaw working groups with Estonia, Latvia, Lithuania, Slovenia, Slovakia, Bulgaria, and Romania. Brzezinski said, "Each aspirant brings a different set of challenges, which require different approaches to defense reform." Gen. Joseph W. Ralston, then the Supreme Allied Commander, Europe, was in charge of assessing military capabilities of the aspirants. Ralston reported that "resource management, force structure, personnel management and English language capability were among the criteria for the NATO membership." Ralston emphasized the ability to deploy a reasonably sized force that can communicate, protect itself, and fight effectively. Ralston's bottom

<sup>&</sup>lt;sup>61</sup> Glen Grant, "How Powerful Are Ukraine's Armed Forces" (video), *Kiev Post*, May 22, 2016, 4:30, accessed December 12, 2016, https://www.kyivpost.com/article/content/ukraine-politics/channel-5-how-powerful-are-ukraines-armed-forces-414296.html?flavour=full.

<sup>&</sup>lt;sup>62</sup> Elizabeth Book, "Criteria for NATO Admission Shift After 9/11," National Defense, October,

line was the personnel restructuring, particularly "knowing what specialists you have and need, a balanced rank structure and effective noncommissioned officer corps, [improved] quality of life and professional education."

Ralston's report provides five recommendations regarding NATO personnel policy. They are: English language capability, balanced rank structure, effective noncommissioned officer corps, improved quality of life, and professional education. Two of these, balanced rank structure and improved quality of life, are addressed in this section. The other three are analyzed in a section on training and education.

Gap

The most significant improvement of the UAF is a transition to the professional-contracted system. Currently the UAF has 156,500 contracted personnel. Even though the UAF personnel policy underwent some notable improvements, much remains to be done. NATO expectations for balanced rank structure and improved quality of life requires monitoring.

In terms of a balanced rank structure, the MOD recognized and acted on the comments from Glen Grant and is actively seeking solutions to the existing problem. This reform, like many others, could possibly be more radical and aggressive, but is constrained by the fact that a full-scale war with Russia could start any day.

In April 2016, Vitalij Babich, the Deputy Chief of the Department of Personnel Policy, announced a new system of manning for the UAF. Babich stated that this new and modern system of personnel management ensures quality manning of the UAF. Developed and based on NATO personnel policy, the new system aims to improve UAF morale and motivation. One of the features of this reform is to adjust the proportion of senior and junior officers of the UAF: generals and

<sup>2002,</sup> accessed December 11, 2016,

 $http://www.national defense magazine.org/archive/2002/October/Pages/Criteria\_for\_NATO4003.aspx.$ 

<sup>63</sup> Ibid.

admirals—0.2-1.9 percent, senior officers—39 percent, junior officers—60.8 percent. <sup>64</sup> Babich stated that this is a NATO standard, though this does not appear in available NATO documents. Therefore, as a part of implementing a new personnel policy, the president of Ukraine cut six general's positions, so generals now represent 0.06 percent of overall personnel. Babich did not mention the actual number of generals in the UAF; moreover, there is no official document or a web page where one can look it up. The only available number is from February 2015: according to Presidential Decree #39/2015, there were 155 general officer positions in the UAF. The actual current number remains unknown. <sup>65</sup>

In addition, the MOD plans to reduce the number of colonel positions from 6.9 to 4.4 percent of the UAF, and more than 2,000 junior officer positions will be changed into noncommissioned officer (NCO) positions. At the same time, the MOD plans to substitute military servicemen for civilian personnel in areas such as administration, medicine, finance, law, and logistics. Babich's bottom line was that the UAF structure is still undergoing changes, so these changes are not final.<sup>66</sup>

RAND proposed two force structures for the UAF, depending on the potential force size.

The proposed structures were adopted from the US Department of Defense's "Active Duty

Personnel by Service by Rank/Grade: April 2015" (see Table 5).<sup>67</sup>

<sup>&</sup>lt;sup>64</sup> "Suchasna Sistema Kadrovogo Menedzhmentu Spriyatime Yakisnomu Komplektuvannyu Ukrainskogo Vijska - Vitalij Babich," Ministry of Defense of Ukraine, April 27, 2016, accessed December 12, 2016, http://www.mil.gov.ua/news/2016/04/27/suchasna-sistema-kadrovogo-menedzhmentu-spriyatime-yakisnomu-komplektuvannyu-ukrainskogo-vijska-vitalij-babich--/.

<sup>&</sup>lt;sup>65</sup> Mychailo Zhyrachov, "Skilky Generaliv v Zsu," Depo UA, August 22, 2016, accessed December 13, 2016, http://www.depo.ua/ukr/war/navishcho-generalskim-zorepadom-zsu-nablizhayut-do-rosiyi-22082016130000.

<sup>&</sup>lt;sup>66</sup> "Suchasna Sistema Kadrovogo Menedzhmentu Spriyatime Yakisnomu Komplektuvannyu Ukrainskogo Vijska - Vitalij Babich," Ministry of Defense of Ukraine, April 27, 2016, accessed December 12, 2016, http://www.mil.gov.ua/news/2016/04/27/suchasna-sistema-kadrovogo-menedzhmentu-spriyatime-yakisnomu-komplektuvannyu-ukrainskogo-vijska-vitalij-babich--/.

<sup>&</sup>lt;sup>67</sup> Oliker et al., Security Sector Reform in Ukraine, 52.

Regarding improved quality of life, the government and MOD understands that the UAF needs the best possible cadre. In order to attract those cadres, the condition and benefits in the UAF need to be improved drastically.

Table 5. Proposed Force Structure for the UAF

| Rank   | Percentage<br>of Force | Total<br>Military<br>Force of<br>146,000 | Total<br>Military<br>Force of<br>250,000 |
|--|------------------------|--|--|
| Civilians  |                        | 40,000                                   | 40,000                                   |
| Uniformed  |                        |  |  |
| Superior officers (major general,<br>lieutenant general, colonel general—<br>counter-admiral, vice-admiral, admiral)                                 | 0.07                   | 69                                       | 137                                      |
| Senior officers (major, lieutenant colonel, colonel—captain [1st–3rd rank], captain-lieutenant)  | 6.50                   | 6,841                                    | 13,552                                   |
| Junior officers (junior lieutenant, lieutenant, senior lieutenant)   | 10.20                  | 10,838                                   | 21,472                                   |
| Total officers   | 16.77                  | 17,748                                   | 35,161                                   |
| Senior enlisted (master sergeant and<br>sergeants-major—midshipman and<br>senior midshipman)   | 10.40                  | 11,042                                   | 21,875                                   |
| Middle enlisted (junior sergeant,<br>sergeant, senior sergeant, starshina—<br>starshina 1st and 2nd class, chief<br>starshina, chief ship starshina) | 52.70                  | 66,672                                   | 132,087                                  |
| Junior enlisted (soldier, senior soldier—<br>matros, senior matros)  | 19.20                  | 9,578                                    | 18,975                                   |
| Total enlisted   | 82.30                  | 87,292                                   | 172,937                                  |

Source: Olga Oliker et al., Security Sector Reform in Ukraine (Santa Monica, CA: RAND, 2016), 52.

In 2016, salaries increased, in some cases fourfold. Privates' pay rose from 2,400 UAH (100\$) to 7,000 UAH (265\$) per month. Those participating in operations in the East get an additional 3,200 UAH that makes it total of 10,400 UAH (389\$) per month. Another significant improvement in the quality of soldiers' lives is compensation for housing costs. Now not only officers, but also soldiers under contract, are eligible for this additional pay, which somewhat solves

<sup>&</sup>lt;sup>68</sup> "Privates to Be Paid No Less Than 7,000 UAH under Contract," *Censor.Net*, January 12, 2016, accessed December 12, 2016,

http://en.censor.net.ua/news/371222/salary\_of\_ato\_soldiers\_to\_increase\_fourfold\_minister\_jaresko.

the problem of housing for service members in the UAF.<sup>69</sup> The increase in compensation helped the UAF to attract new contracted soldiers and officers.

The UAF currently has more than 150,000 contracted soldiers and officers, which is more than the overall strength of the UAF in the beginning of 2014. Therefore, there had been progress, but the UAF remains far from NATO expectations. The gap is significant in the personnel criteria, and perhaps the main problem is the absence of transparency. It is hard to help Ukraine reform and transition when the MOD keeps information about personnel classified. The bottom line is that the UAF is addressing, if not directly fixing, the situation based on NATO expectations. After twenty-three years of existence, the system is so firmly set, that even small steps towards reformation should be encouraged. The UAF needs time to fully change the personnel policy and meet the NATO standard.

## Training and Education

This subsection shows the current state of education and training in the UAF. In addition, it analyzes the gap between NATO's requirements in these areas and the current state of the UAF. The analysis covers the period from the end of 2013 to the end of 2016. The purpose is to show the progress, or lack of it, during the three years of the ongoing confrontation with the Russian Federation in Eastern Ukraine. The analysis of available material regarding training and education in the UAF shows that issues like NCO corps and professional education are changing for the better. Moreover, if we compare between 2013 and 2016, the difference in budget and training is obvious. Nevertheless, no sources claim the speed of change is appropriate, or that the end is in sight. More work remains in the areas of English speaking capabilities, and the professional education of officers and NCOs.

<sup>&</sup>lt;sup>69</sup> "The Cabinet Approved Compensation for Rent of Housing for the Contract," *Ukrop News 24*, August 8, 2016, accessed December 12, 2016, http://ukropnews24.com/the-cabinet-approved-compensation-for-rent-of-housing-for-the-contract/.

#### **Current State**

According to official data, the UAF budget for training and education is growing (see Table 6).

Table 6. Funding for the UAF's Training in 2013-2015, UAH million

| 2013  |        | 2014 |       |        | 2015 |       |        |     |
|---|--------|------|-------|--------|------|-------|--------|-----|
| plan  | actual | %    | plan  | actual | %    | plan  | actual | %   |
| Joint Rapid Reaction Forces (Constant Readiness Forces) |        |      |       |        |      |       |        |     |
| 391.3   | 376.1  | 96.1 | 312.5 | 292.6  | 93.6 | 885.9 | 885.9  | 100 |
| Main Defense Forces (Reserve Forces)                    |        |      |       |        |      |       |        |     |
| 53.4  | 51.3   | 96.1 | -     | -      | -    | -     | -      | -   |
| Total in the Armed Forces                               |        |      |       |        |      |       |        |     |
| 444.7   | 427.4  | 96.1 | 307.0 | 307.0  | 100  | 885.9 | 885.9  | 100 |

Source: White Book 2015 (Kiev: Ministry of Defense of Ukraine, 2016), 37.

The official data on the number of exercises also looks impressive. The progress is obvious, but it is important to remember that the size of the UAF in 2015 was twice that in 2013, and thus the amount of training should also at least have doubled (see Table 7).

Table 7. Amount of Training and Exercises of the UAF in 2013-2015

| Type of training or | 2013    | 2014    | 2015    | 2016     |
|---------------------|---------|---------|---------|----------|
| exercise / Year     |         |         |         |          |
| Brigade             | -       | -       | 15      | 19       |
| Battalion           | 8       | 18      | 88      | 207      |
| Company             | 45      | 192     | 358     | 606      |
| Platoon             | 99      | 325     | 703     | 908      |
| Bombardment/live    | 190/120 | 507/326 | 674/769 | 4,000    |
| fire (Air Force)    |         |         |         | missions |

Source: White Book 2013 (Kiev: Ministry of Defense of Ukraine, 2014), 16; White Book 2014 (Kiev: Ministry of Defense of Ukraine, 2015), 30; White Book 2015 (Kiev: Ministry of Defense of Ukraine, 2016), 39; "Boyova Pidgotovka ZSU – Dorosla Gra z Duje Visokimi Stavkami," Republic, January 3, 2017, accessed January 25, 2017, http://republic.com.ua/article/44398-Boyova-pidgotovka-ZSU---dorosla-gra-z-duje-visokimi-stavkami.html.

RAND reports noticeable positive changes in UAF training and education, including an improvement in the duration and content of the soldiers' basic training, a particular approach towards unit training and the matter of unit cohesion, the involvement of war veterans and combat experienced servicemen in training cycles as instructors, and the implementation of Western

techniques and NATO instructor missions. Numerous interviews suggest that the professional level of ordinary soldiers is improving. Nevertheless, the report highlights particular gaps that require additional work, such as incorporation of the latest experience into officer and NCO curriculum, lack of training equipment for the training units due to the need of this equipment on the front line, and insufficient training for the actual instructors.<sup>70</sup>

#### **Desired State**

Ian Brzezinski's report, as mentioned in the previous section, provided five recommendations regarding NATO personnel policy. They are English language capability, balanced rank structure, effective NCO corps, improved quality of life, and professional education. Two of these, balanced rank structure and improved quality of life, were addressed above in the Manning and Personnel Issues section. This section will address English language capability, effective non-commissioned officer corps, and professional education.

NATO has no specific training requirements for potential members. However, once a country becomes a member, internal NATO organizations like the NATO Training Group (NTG)<sup>71</sup> and the NATO Education Training Exercise and Evaluation (ETEE)<sup>72</sup> exist to ensure and assist new members with issues of interoperability and standardization of education and training. Moreover, the Joint Multinational Readiness Center, in Hohenfels, Germany, is currently working on implementing NATO standards into exercise plans for existing members of the organization.<sup>73</sup>

<sup>&</sup>lt;sup>70</sup> Oliker et al., Security Sector Reform in Ukraine.

 $<sup>^{71}</sup>$  "NATO Training Group," NATO, accessed January 25, 2017, http://www.act.nato.int/nato-training-group.

<sup>&</sup>lt;sup>72</sup> "NATO Education Training Exercise and Evaluation (ETEE)," NATO, accessed January 25, 2017, http://www.act.nato.int/etee.

<sup>&</sup>lt;sup>73</sup> Karen Sampson, "JMRC Integrating NATO Standards into Training," US Army, December 12, 2016, accessed January 25, 2017, https://www.army.mil/article/178930/jmrc\_integrating\_nato\_standards\_into\_training.

Thus, even longtime members such as the United States, Germany, and the United Kingdom are still working on bringing their armed forces to NATO standard. Because NATO is not just about militaries, it also includes the political, economic, and diplomatic domains of a possible member. Therefore, an aspiring member possible member is not required to attain the NATO standard before joining. However, future members should have a certain level of competency, and strive for improvement. Before Ukraine can join NATO, it has to demonstrate the desire to attain the NATO level of competency in the military domain.

### Gap

The analysis of the gap between NATO standards and the achievements of the UAF is based on comments from Colonel Oleksii Taran, the chief of Department of Training of the UAF, Deputy of the Chief of General Staff. Colonel Taran summarized the accomplishments and achievements of the UAF in the area of training and education during the three years of the confrontation with the Russian Federation in Eastern Ukraine.<sup>74</sup> Taran mostly covered the year of 2016, but to reinforce the result, he compared it with 2014 and 2015.

English language capability. Colonel Taran did not discuss this issue in his interview, however he constantly stressed the importance of training and advising missions from the allied countries. From the monograph author's experience, every soldier who went through training with foreign instructors picked up some of the basics of English. Right before the war, this issue had been one of the priorities of the General Staff of Ukraine. Officers were sent to learn English in specially designed courses. Each brigade could hire several of English instructors or teachers. Those lessons were overseen by and a direct responsibility of the unit commander. There was even a period in the UAF from 2012-2013 when field grade officers could not be promoted without a

<sup>&</sup>lt;sup>74</sup> "Boyova Pidgotovka ZSU – Dorosla Gra z Duje Visokimi Stavkami," *Republic*, January 3, 2017, accessed January 25, 2017, http://republic.com.ua/article/44398-Boyova-pidgotovka-ZSU---dorosla-gra-z-uje-visokimi-stavkami.html.

certain level of English and testing was a part of the board competition, like a physical training test. Ninety percent of UAF personnel studied English at school, so there is a foundation for improvement. According to a recent argument, some of the US instructors that are currently training Ukrainian soldiers are impressed by their language skills and state that there is no trouble communicating with Ukrainian soldiers in English. In 2016, the Minister of Defense, Stepan Poltorak, announced that NATO instructors successfully certified five battalions of the UAF as trained to NATO standard. Therefore, the UAF has some battalions that can communicate and operate with allied forces.

Colonel Taran recognized that the UAF lacks a professional NCO corps and qualified instructors. To mitigate this, the General Staff established the NCO Training Center. The Center was established according to NATO standards, and prepares NCOs and instructors at three different levels (basic, intermediate, and advanced), which fully mirrors the systems of NATO members. The Center is operational and run by senior NCOs. Almost five hundred NCOs and instructors graduated from the school in 2016. The Center will prepare another six hundred in 2017. Colonel Taran is grateful for help in reforming the NCO corps provided by international partners from NATO.<sup>77</sup>

According to Colonel Taran, the essence of professional education is constantly changing. Since the conflict began, the Department of Training has been continually incorporating lessons learned from the front line. The General Staff is constantly looking for way to incorporate available combat experience into educational and training programs. From individual training tasks to the education of cadets and senior officers, all are subject to change. Moreover, Taran suggested that

<sup>&</sup>lt;sup>75</sup> "Ukrainian Soldiers Learning from the US Military," *Deutsche Welle*, accessed January 25, 2017, http://www.dw.com/en/ukrainian-soldiers-learning-from-the-us-military/a-18399992.

<sup>&</sup>lt;sup>76</sup> "Poltorak Rozpoviv yak Armiya Perexodyt na Standarty NATO," Slovo i Dilo, December 6, 2016, accessed January 25, 2017, https://www.slovoidilo.ua/2016/12/06/novyna/bezpeka/poltorak-rozpoviv-yak-armiya-perexodyt-na-standarty-nato.

<sup>&</sup>lt;sup>77</sup> "Boyova Pidgotovka ZSU – Dorosla Gra z Duje Visokimi Stavkami."

the advisory and training personnel from NATO countries did a great deal of work in this area. The Ukrainian General Staff is incorporating the methods and practical experience of NATO partners.<sup>78</sup>

However, not everybody agrees with this rosy picture. Glen Grant has his own vision of which NATO standards should become a priority for the UAF and the Ukrainian Government. Two of his ten highlighted areas are closely related to the training and education of the UAF. The first is about proper and adequate military training and the second is about education and adequate leadership of the officer corps. Regarding adequate training, Grant says it involves proper individual training, unit training, and combined arms training; and only after all training requirements are met will the UAF be ready to send troops into a fight. When Grant discusses adequate officers leadership, he refers to officers' virtues like honesty and motivation; leadership skills; and the importance of getting education out of the classroom and into field problems to hone needed skills. Grant emphasizes the importance of delegation and trust between different command levels, mission-oriented tasks, and avoiding micromanagement. The most important thing about these two priorities is that they are not currently met and Grant suggests that the UAF is not working hard enough to fix these areas.<sup>79</sup>

Both Grant and Taran are right to a certain extent. A gap exists and the Ukrainian government understands this. The General Staff officers and foreign advisors are constantly working on improving the education and training of the UAF. A Defense Educating Enhancement Programme (DEEP) team, the biggest such program that is working in a partner country in NATO, is currently assisting the UAF and Ukrainian government. 80 The Chief of the General Staff of

<sup>78</sup> Ibid

<sup>&</sup>lt;sup>79</sup> Glen Grant, "NATO Standards for Ukraine," *LinkedIn*, February 27, 2016, accessed January 25, 2017, https://www.linkedin.com/pulse/nato-standards-ukraine-glen-grant.

<sup>&</sup>lt;sup>80</sup> "NATO's Support to Ukraine," NATO, July, 2016, accessed January 25, 2017, http://www.nato.int/nato\_static\_fl2014/assets/pdf/pdf\_2016\_07/20160627\_1607-factsheet-nato-ukraine-support-eng.pdf.

Ukraine is planning to be NATO-ready by the end of 2020. The official plan for transformation of the UAF is currently in the Cabinet of Ministers and awaits resolution.<sup>81</sup>

## **Framing Solutions**

This research recognizes that any reforms of the UAF require investment and will put additional pressure on the weak, war-torn economy of Ukraine. However, this research suggests that the UAF can conduct some reforms that do not require significant investment, yet also demonstrate commitment to reform and potential integration with NATO. The purpose of this section is to suggest quick and inexpensive reforms. It consists of four parts, each consisting of a set of reforms, and an accompanying explanation. The parts are interoperability, budget, education and training, and personnel.

## Interoperability

The question of interoperability is the most important requirement to be part of a multinational coalition or organization. NATO's essential mission is to unite different nations under a shared purpose to solve emerging problems in the international arena. Therefore, NATO members develop the capability to act and fight as a coherent body, despite differences of nationality, language, or religion. Luckily, military personnel from all over the world share similar procedures and regulations in terms of fighting an adversary. All use maps, operational symbols and graphics, and have terms and acronyms to describe a situation. Ukraine is no exception. The UAF still uses symbols and graphics inherited from the Soviet Union. NATO acronyms and terminology have not been incorporated in UAF doctrine. Only in the summer of 2016 did the UAF make a huge step towards interoperability by changing the color of the friendly forces on the map from RED to BLUE.

<sup>&</sup>lt;sup>81</sup> "Programa Rozvytky ZSU," *Ukrainska Pravda*, December 4, 2016, accessed January 25, 2017, http://www.pravda.com.ua/news/2016/12/4/7128799/.

As a positive step towards interoperability, the UAF should incorporate NATO operational symbols and graphics. Establish a working team of officers and NCOs that have experience from foreign schools and courses, tasked to develop a manual of NATO-UAF terms and definitions would facilitate this reform. Adopting NATO graphics would increase the level of interoperability between NATO and the UAF. This reform does not require a significant investment, but demonstrates the UAF's commitment towards NATO. However, the development and incorporation of NATO terminology, symbols and graphics will take time. In order to accelerate the process, the UAF will need a transition plan.

The UAF should also establish a Liaison Officer (LNO) School that will educate officers and NCOs that understand NATO doctrine and terminology, and therefore can serve as a link between NATO and the UAF. Doing so would create a body of instructors who can teach the rest of the force. It would be beneficial to set a hard testable deadline for implementation, such as 2020 in line with the plan to be NATO ready by 2020. This hard deadline would force implementation and prevent any government organizations from dragging their feet.

## Budget

This research offers a different look at UAF spending and its priorities. Based on the author's personal experience and observation, there are several areas in the UAF that require immediate improvements and investments, for example signals, Unmanned Aerial Vehicles (UAV), and antitank (AT) capabilities. However, there are instances when the Ukrainian government and the UAF spends money in places which do not necessarily improve the UAF's standing from NATO's point of view, for example parades, uniforms, and the M-16 rifle.

Ukraine has been in a state of war since the spring of 2014. Nevertheless, in 2014, 2015, and 2016 on August 24, Kiev has witnessed military parades. Units in the parade spend an average of two months preparing for it: not fighting, not training, but marching in perfect formations. From 2010 to 2013, during the Presidency of the ousted Victor Yanukovich, the parades did not take

place due to lack of funds. Rather than spending every available dollar to improve fighting capabilities, the UAF now conducts parades.

Another doubtful expenditure of military money was a new uniform. Over a period of two years, the Ukrainian government changed the entire uniform of Ukrainian soldiers and officers from boots to hats. The quality of the new uniform nonetheless cannot be compared with the uniforms of NATO allies like Germany, the United Kingdom, and Poland. The author suggests that spending priority should go to things like signal equipment, the UAV fleet, and AT assets rather than new uniforms.

The Ukrainian military industrial complex will initiate production of the Ukrainian version of the famous M-16 rifle, claiming that this is the first real step towards NATO standard. The M-16 will replace the obsolete AK-74 and AKM. However, the Ukrainian M-16 will use the old 5.45 AK round of which Ukraine has plenty in storage. Eventually, all Ukrainian M-16s will be rebuilt for NATO standard 5.56 rounds. 82 Thus, the plan is to standardize on a new rifle with old munitions, and then rechamber the rifle for new ammunition. To build and buy this new rifle is another burden for the Ukrainian economy. Nevertheless, Ukraine could spend its money more wisely by using up the old AK rounds and then rechambering its rifles to the NATO round.

Regarding reforming its budget, the UAF should rethink spending and create a priority list. Signals, UAVs, and AT assets should be the number one priorities, which would enhance UAF fighting capabilities, making it a more desirable ally for NATO.

# **Education and Training**

The Education and Training section discussed some of the current initiatives which may be subject to change in the future. Officer education could be significantly improved without

<sup>&</sup>lt;sup>82</sup> Will Ponomarenko, "M16 Rifles Will Be Produced in Ukraine, Another Step Towards NATO Standards," *Kyiv Post*, January 20, 2017, accessed March 20, 2017, https://www.kyivpost.com/ukraine-politics/m16-rifles-will-produced-ukraine-another-step-towards-nato-standards.html?utm\_source=traqli&utm\_medium=email&utm\_campaign=traqli\_daily.

additional investment. Currently, the Intermediate Level Education program in the Defense

University of Ukraine includes a two-year program in the resident curriculum and a three-year

program in the distance learning curriculum. Two years however is a long term that pulls the officer
from their working environment. In addition, there is a gap in the UAF officer's education system;
officers do not attend any sort of school or course for qualification improvements from
commissioning until the Defense University of Ukraine, because the UAF does not have captain
career schools or battalion command courses.

The UAF should reduce the duration of the ILE program in the Defense University of Ukraine to one year. The UAF could then redirect the funds and assets accumulated through this reduction towards creation of a captain career course (company command school) and a battalion command school along the lines of the US Army's Captain Career Course, and the School of Command Preparation for battalion/brigade command. This reform would increase the level of officers' professional education, allowing officers to reinforce their practical knowledge with theory, doctrine, and history, and better prepare them for the upcoming assignments. This reform does not require new investments, only reallocation of assets.

### Personnel

There are two types of war, total and limited. In total war, the existential threat mobilizes the population to fight against the threat, thus sacrifices and losses are seen as a necessary part of the struggle. Ukraine, however, is fighting limited war, which means the Ukrainian government is not officially in a state of war, and only a limited amount of the economy and government assets are involved in the fight. In a limited war, maintaining the high morale and motivation of the military requires more effort. In Ukraine today, being a UAF service member is the most insecure profession. For the average salary of \$ 400 a month, Ukrainian soldiers and officers risk their lives on a daily basis. Yet their family members, wives, parents, and children face a paradox: living in the safe rear, they constantly encounter other people who have no connection to the war, and

sometimes refer to it as meaningless. While UAF soldiers are highly patriotic, it is difficult to focus on military missions when they must worry about caring for their families. Problems with military housing, medical care, and low pay, reinforced by deadly risk, significantly reduce the UAF's recruitment capability. Therefore, where possible, the government should provide better pay and benefits to UAF soldiers and their families. Even if pay is not increased, there are specific measures that could help in addressing this issue.

If the government cannot pay more, it should strive to make it more prestigious, respected, and better-supported (family, housing, medical programs) to serve: programs such as veteran's preference in government hiring, and informational campaigns for supporting soldiers, veterans, and their families could help. Such reform would increase the national level of commitment towards UAF members and veterans in order to ensure better quality of volunteers who serve longer, thus retaining trained personnel.

### Conclusion

ADM framing provides a method to evaluate options for integrating the UAF more closely with NATO. Analyzing the OE shows that integration on a budget is the desired end state. Problem framing analysis identified gaps between the current and desired end states, which can be solved in part through inexpensive reforms that also demonstrate UAF's commitment to NATO.

The evaluation analyzes just four designated criteria: budget, reserve system, manning and personnel, and education and training, and thus cannot be treated as the full picture. However, the analysis demonstrates that in some cases—budget and reserve system—the UAF is up to NATO standard. In other cases—manning and personnel, education and training—the UAF and the Ukrainian government made significant progress compared to prewar years. Nonetheless, much more should be done to close existing gaps.

## **Summary of Findings**

With the allocation of 5 percent of the GDP on defense spending, the UAF is obviously meeting the NATO 2 percent requirement. However, a thorough analysis of the actual numbers shows that Ukraine's 5 percent for 250,000 service members is smaller than the Polish 2 percent for 100,000 service members. Thus, the Ukrainian government should further increase military spending. With 85,000 service members in the PMR constituting 35 percent of the total military force of Ukraine, the UAF is on the right track and even surpasses some existing NATO members. Improvements in quality of life for UAF members enabled the UAF to recruit and retain 150,000 contracted soldiers and officers. However, things like the unbalanced rank structure and absence of transparency continue to be significant setbacks. With support from the international advisors and NATO training missions, the UAF is improving in English language capability, efficiency of the NCO corps, and professional education. These efforts should continue.

## Suggested Reforms

Even in times of economic hardship, there are ways to keep moving towards NATO integration. The proposed quick and inexpensive reforms not only narrow the gap between the UAF and NATO standards, but also highlight that Ukraine is fully committed to attaining them. The UAF should gradually implement NATO graphics and terminology into its doctrine by using liaison officers. The matter of interoperability should become a part of the educational curriculum and designated as a distinct program with a manager and rigid timeline. Defense money should be spent according to the priority list, which should be established through thorough analysis. Today, the quality of officer education should be improved by restructuring the existing system, and implementing additional schools that mirror best international practices. In order to recruit and retain better quality volunteers, the Ukrainian government and the UAF should continue to increase

benefits for existing and former service members and their families. In addition, it should conduct a national informational campaign towards making the UAF service more prestigious and respected.

# Significance

NATO characterizes its goal for Ukraine as "a sovereign, independent, and stable Ukraine, firmly committed to democracy and the rule of Law, is the key to Euro-Atlantic security." These words have more meaning than ever today. The complexity of the geopolitical situation in the world demonstrates that it is almost impossible to be fully committed to international arrangements. The failed Budapest Memorandum is one example. However, it is also hard to protect the sovereignty of a country, when that country is not committed to its own self-defense. The war in Ukraine has an international impact, but nevertheless the main burden of problem solving lies on Ukraine itself. International assistance, advice, and support is all beneficial, but Ukraine and the UAF should find optimal solutions that fit their own interests. The immediate goal here should not be integration with NATO, but a militarily strong and politically independent Ukraine. However, because NATO standards are a concrete representation of the requirements for a strong, well-trained army, the UAF should aim for these standards. Eventually, when the UAF achieves the desired state, Ukraine should be welcomed into NATO.

This research offers further insight into the existing problems in the UAF, and possibly new ways of solving them. This research underlines the areas that require attention and suggests that conceptually it is possible to narrow the gap between the current state of the UAF and NATO standards with quick and relatively inexpensive reforms. Other areas that deserve further investigation include: force structure and its effectiveness, command structure and its effectiveness, arrangements of the headquarters, the UAF Navy, the UAF Air Force, the UAF Highly Mobile

<sup>&</sup>lt;sup>83</sup> "Relations with Ukraine," NATO, June 22, 2016, accessed September 26, 2016, http://www.nato.int/cps/en/natolive/topics\_37750.htm.

Airborne Forces and its similarities with US Marine Corps, allies' assistance and support analysis.

Given the current geopolitical situation in the world, a more thorough analysis of all pros and cons for the Ukraine joining NATO would be well worth the effort.

## **Bibliography**

- Arbatova, Nadezhda K., and Alexander A. Dynkin. "World Order after Ukraine." *Survival Global Politics and Strategy*. March, 2016. Accessed August 25, 2016. https://www.iiss.org/en/publications/survival/sections/ 2016-5e13/survival--global-politics-and-strategy-february-march-2016-44d5/58-1-06-arbatova-and-dynkin-ba5a.
- Army Reference Doctrinal Publication 5-0, *The Operations Process*. Washington, DC: Government Printing Office, 2008.
- Book, Elizabeth. "Criteria for NATO Admission Shift After 9/11." National Defense. October, 2002. Accessed December 11, 2016. http://www.nationaldefensemagazine.org/archive/2002/October/Pages/Criteria\_for\_NATO 4003.aspx.
- Censor.Net. "Salary of ATO Soldiers to Increase Fourfold, Minister Jaresko." January 27, 2016. Accessed October 25, 2016. http://en.censor.net.ua/news/371222/salary\_of\_ato\_soldiers\_to\_increase\_fourfold\_minister\_jaresko.
- ———. "Zkintsya Jovtnya Ukrayinska Armiya Staye Kontraktnoyu Ta Dobrovolchoyu Poroshenko." October 15, 2016. Accessed December 12, 2016. http://ua.censor.net.ua/news/410633/z\_kintsya\_jovtnya\_ukrayinska\_armiya\_staye\_ko ntraktnoyu\_ta\_dobrovolchoyu\_poroshenko.
- ———. "Privates to Be Paid No Less Than 7,000 UAH under Contract." January 12, 2016. Accessed December 12, 2016. http://en.censor.net.ua/news/371222/salary\_of\_ato\_soldiers\_to\_increase\_fourfold\_minister\_jaresko.
- Commonwealth of Independent States Legislation. "Presidential Decree of Ukraine." March 17, 2014. Accessed December 1, 2016. http://cis-legislation.com/document.fwx?rgn=66102.
- Democratic Control of Armed Forces. A Centre for Security, Development and the Rule of Law. "The Security Sector Legislation of Ukraine." 2015. Accessed December 1, 2016. http://www.dcaf.ch/Publications/The-Security-Sector-Legislation-of-Ukraine-2012-2014-Updates.
- Deutsche Welle. "Ukrainian Soldiers Learning from the US Military." Accessed January 25, 2017. http://www.dw.com/en/ukrainian-soldiers-learning-from-the-us-military/a-18399992.
- Fandom. "Modern Day Military Pricing List." 2009. Accessed October 25, 2016. http://nation-creation.wikia.com/wiki/Modern\_Day\_Military\_Pricing\_List.
- Grant, Glen. "How Powerful Are Ukraine's Armed Forces" (video). May 22, 2016. Accessed December 12, 2016. https://www.kyivpost.com/article/content/ukraine-politics/channel-5-how-powerful-are-ukraines-armed-forces-414296.html?flavour=full.
- ——. "NATO Standards for Ukraine." LinkedIn. February 27, 2016. Accessed January 25, 2017. https://www.linkedin.com/pulse/nato-standards-ukraine-glen-grant.

- IHS Jane's Military and Security Assessments Intelligence Center. "Jane's Sentinel Security Assessment: Russia and the CIS." 2014. Accessed November 21, 2016. http://www.janes360.com/images/assets/760/34760/ukraine\_armed\_forces.pdf.
- Independent Advisory Group on Country Information. "Country Policy and Information Note. Ukraine: Military Service." November, 2016. Accessed November 21, 2016. https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/56717 2/CPIN\_-\_Ukraine\_-\_Military\_Service\_v\_3\_0.pdf.
- Kates, Glenn. "Defense Minister: Kyiv's Least Secure Job." RadioFreeEurope. October 13, 2014. Accessed October 27, 2016. http://www.rferl.org/a/ukraine-revolving-door-defense-ministers/26635213.html.
- Kiev Post. "Yanukovych Signs Order on Last Conscription and Switching to Contract Service Army." October 14, 2013. Accessed December 11, 2016. https://www.kyivpost.com/article/content/ukraine-politics/yanukovych-signs-order-on-last-conscription-and-switching-to-contract-service-army-330496.html.
- Kobasa, Askold I. "A Strategic-Military Analysis of the Ukrainian Armed Forces." Master's thesis, Naval Postgraduate School, 1995. Accessed October 19, 2016. https://core.ac.uk/download/pdf/36724094.pdf.
- Kottasova, Ivana. "Which NATO Members Are Falling Short On Military Spending?" *CNN* Money. April 15, 2016. Accessed October 27, 2016. http://money.cnn.com/2016/04/15/news/nato-spending-countries/.
- Ministry of Defense of Ukraine. "President Approved New Edition of Military Doctrine of Ukraine." September 24, 2015. Accessed October 19, 2016.http://www.mil.gov.ua/en/news/2015/09/24/president-approved-new-edition-of-military-doctrine-of-ukraine/.
- ———. "Military Budget for Year 2016 Is Four Times Greater Than in 2014"." February 27, 2016. Accessed October 25, 2016. http://www.mil.gov.ua/en/news/2016/02/27/defense-minister-of-ukraine-military-budget-for-year-2016-is-four-times-greater-than-in-2014%E2%80%9D/.
- ———. "Suchasna Sistema Kadrovogo Menedzhmentu Spriyatime Yakisnomu Komplektuvannyu Ukrainskogo Vijska Vitalij Babich." April 27, 2016. Accessed December 12, 2016. http://www.mil.gov.ua/news/2016/04/27/suchasna-sistema-kadrovogo-menedzhmentu-spriyatime-yakisnomu-komplektuvannyu-ukrainskogo-vijska-vitalij-babich-/.
- North Atlantic Treaty Organization. "Relations with Ukraine." June 22, 2016. Accessed September 26, 2016. http://www.nato.int/cps/en/natolive/topics\_37750.htm.
- ——. "Ukraine Can Rely On NATO, Secretary General Says in Visit to Kiev." September 22, 2015. Accessed October 20, 2016.http://www.nato.int/cps/en/natohq/news\_122690.htm.

- —. "Relations with Ukraine." June 22, 2016. Accessed October 20, 2016. http://www.nato.int/cps/en/natolive/topics\_37750.htm. —. "Defense Expenditures of NATO Countries (2009-2016)." July 4, 2016. Accessed November 4, 2016. http://www.nato.int/nato\_static\_fl2014/assets /pdf/pdf\_2016\_07/20160704\_160704-pr2016-116.pdf. -. "NATO Framework Policy on Reserves." March 13, 2012. Accessed December 3, 2016. http://www.act.nato.int/images/stories/structure/reserve/mc\_0441\_2\_eng.pdf. —. "National Reserve Forces Committee (Nrfc)." February 2, 2015. Accessed December 3, 2016. http://www.act.nato.int/nrfc. —. "National Reserve Forces Status: United States of America." Accessed December 3, 2016. http://www.nato.int/nrfc/database/usa.pdf. —. "National Reserve Forces Status: Poland." Accessed December 3, 2016. http://www.nato.int/nrfc/database/poland.pdf. —. "National Reserve Forces Status: The Republic of Lithuania." Accessed December 3, 2016. http://www.nato.int/nrfc/database/lithuania.pdf. —. "NATO Training Group." Accessed January 25, 2017. http://www.act.nato.int/natotraining-group. Oliker, Olga, Lynn E. Davis, Keith Crane, Andrew Radin, Celeste Ward Gventer, Susanne
- Oliker, Olga, Lynn E. Davis, Keith Crane, Andrew Radin, Celeste Ward Gventer, Susanne Sondergaard, James T. Quinlivan, Stephan B. Seabrook, Jacopo Bellasio, Bryan Frederick, Andriy Bega, and Jakub Hlavka. *Security Sector Reform in Ukraine*. Santa Monica: RAND, 2016.
- Olynyk, Stephen D. "Ukraine as a Post-Cold War Military Power." Joint Force Quarterly (Spring 1997): 87-94. Accessed September 11, 2016. http://www.dtic.mil/doctrine/jfq/jfq-15.pdf.
- Poroshenko, Petro. "Speech of the President of Ukraine at the Independence Parade." August 24, 2016. Accessed September 11, 2016. http://www.president.gov.ua/en/news/vistup-prezidenta-ukrayini-pid-chas-paradu-nezalezhnosti-37949.
- Reforms in UA. "Ukraine 2020 Strategy." Accessed September 10, 2016. http://reforms.in.ua/sites/default/files/imce/2020booklet21\_11engpreview.pdf.
- Republic. "Boyova Pidgotovka Zsu Dorosla Gra z Duje Visokimi Stavkami." January 3, 2017. Accessed January 25, 2017. http://republic.com.ua/article/44398-Boyova-pidgotovka-ZSU--dorosla-gra-z-duje-visokimi-stavkami.html.
- Sampson, Karen. "JMRC Integrating NATO Standards into Training." US Army. December 12, 2016. Accessed January 25, 2017. https://www.army.mil/article/178930/jmrc integrating nato standards into training.
- Schenking, Scott. "Back to the 90s How Past Mistakes Will Drive Ukraine's Future." Transconflict. March 7, 2014. Accessed September 17, 2016.

- http://www.transconflict.com/2014/03/back-to-the-90s-how-past-mistakes-will-drive-ukraines-future-073/.
- Strekal, Oleg. "The Ukrainian Military and Civilmilitary Relations in the Post-Cold War Era." GlobalSecurity.org (1994): 11-14. Accessed October 19, 2016. http://www.globalsecurity.org/military/library/report/1994/ocp2.pdf.
- Trading Economics. "Military Expenditure (% of GDP) in Ukraine." 2015. Accessed October 25, 2016. http://www.tradingeconomics.com/ukraine/military-expenditure-percent-of-gdp-wb-data.html.
- *Ukrainska Pravda*. "Programa Rozvytky ZSU." December 4, 2016. Accessed January 25, 2017. http://www.pravda.com.ua/news/2016/12/4/7128799/.
- *Ukraine Today*. "Ukraine to Increase Military Expenditure by 30% in 2016." December 5, 2015. Accessed October 25, 2016. http://uatoday.tv/politics/ukraine-to-increase-military-expenditure-by-30-in-2016-548205.html.
- *Ukrop News 24*. "The Cabinet Approved Compensation for Rent of Housing for the Contract." August 8, 2016. Accessed December 12, 2016. http://ukropnews24.com/the-cabinet-approved-compensation-for-rent-of-housing-for-the-contract/.
- UNIAN Information Agency. "Rada Votes to Increase Size of Ukraine's Army to 250,000 Men." March 05, 2016. Accessed October 27, 2016. http://www.unian.info/politics/1052052-rada-increases-size-of-ukraines-army-to-250000-men.html.
- ——. "Kraine's Defense Ministry Elaborates On Military Reserv Read More On Unian//www.unian.info/society/1541926-ukraines-defense-ministry-elaborates-on-military-reserve.html: Http." September 27, 2016. Accessed December 1, 2016. http://www.unian.info/society/1541926-ukraines-defense-ministry-elaborates-on-military-reserve.html.
- Vorobiov, Evgen. "Ukraine's Parliament Passed the Much-Needed 2016 Budget." Euromaidan Press. December 27, 2015. Accessed October 25, 2016. http://euromaidanpress.com/2015/12/27/ukraines-parliament-passed-the-much-needed-2016-budget/#arvlbdata.
- The White House. "Fact Sheet: U.S. and NATO Efforts in Support of NATO Partners, Including Georgia, Ukraine, and Moldova." U.S. Mission to the North Atlantic Treaty Organization. July 10, 2016. Accessed September 11, 2016. https://nato.usmission.gov/fact-sheet-u-s-nato-efforts-support-nato-partners/.
- Wolchik, Sharon L., and Volodymyr Zviglyanich, eds. *Ukraine: The Search for a National Identity*. Lanham, MD: Rowman and Littlefield, 2000.
- Zhyrachov, Mychailo. "Skilky Generaliv v Zsu." Depo UA. August 22, 2016. Accessed December 13, 2016. http://www.depo.ua/ukr/war/navishcho-generalskim-zorepadom-zsu-nablizhayut-do-rosiyi-22082016130000.